



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,027	12/31/2003	John C. Pederson	E30.2-9125US03	9351
490	7590	09/20/2005	EXAMINER	
VIDAS, ARRETT & STEINKRAUS, P.A. 6109 BLUE CIRCLE DRIVE SUITE 2000 MINNETONKA, MN 55343-9185			LEE, BENJAMIN C	
			ART UNIT	PAPER NUMBER
			2632	

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

15

<b>Office Action Summary</b>	Application No. 10/750,027	Applicant(s) PEDERSON, JOHN C.	
	Examiner Benjamin C. Lee	Art Unit 2632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 August 2005.  
 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 50-71 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 50-71 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/06/04, 2/03/05, 4/11/05, 7/12/05, 8/15/05</u> | 6) <input type="checkbox"/> Other: _____  |

***Response To Amendment***

***Claim Status***

1. Claims 50-71 are pending. ***Claim Rejections - 35 USC § 102***
2. Claims 50 and 52-57, 62 and 64-67 are rejected under 35 U.S.C. 102(b) as being anticipated by Montalan et al. (US pat. #5,490,049).

1) In considering claim 50:

Montalan et al. discloses the claimed light emitting diode assembly comprising:

- a) a culminator (reflects/collects and directs/redirects light, as does 302 in Figs. 1-3) assembly, said culminator assembly comprising three aligned reflector cavities (302 in Figs. 1-3 and 6), each of said reflector cavities having a top, a bottom, and a light emitting diode aperture (302) (Figs. 1-3);
- b) at least one light emitting diode mounting surface (100 supporting 402) comprising three light emitting diodes (404), each of said light emitting diodes being at least partially disposed within one of said light emitting diode apertures (302 in Figs. 1-3);
- c) a cover (200, 502), said cover having a forward surface and an interior, said culminator assembly being constructed and arranged for at least partial insertion within said interior (Figs. 1-2); and
- d) at least one attachment member constructed and arranged to engage said light emitting diode mounting surface and said cover to position said culminator assembly at least partially within said cover (510, 510a; 108, 108a).

Art Unit: 2632

2) Regarding claim 52, Montalan et al. discloses all of the claimed subject matter as in claim 50, including the claimed said reflector cavities defining a central cavity and two opposite end cavities, said central cavity and said two opposite end cavities being aligned along a common longitudinal axis (Figs. 1-2).

3) Regarding claim 53, Montalan et al. discloses all of the claimed subject matter as in claim 50, including the claimed said reflector cavities defining a central cavity and two opposite end cavities, said central cavity and said two opposite end cavities being regularly spaced along a common longitudinal axis (Figs. 1-2).

4) Regarding claim 54, Montalan et al. discloses all of the claimed subject matter as in claim 50, including the claimed said cavities being in contact with each other (Figs. 2).

5) Regarding claim 55, Montalan et al. discloses all of the claimed subject matter as in claim 50, including the claimed said cavities being separated from each other (Fig. 1).

6) Regarding claim 56, Montalan et al. discloses all of the claimed subject matter as in claim 50, including the claimed said cover (200, 500; col. 8, line 10-12) comprising a transparent face constructed and arranged for positioning proximate to said top of said cavities.

7) Regarding claim 57, Montalan et al. discloses all of the claimed subject matter as in claim 50, including the claimed said cover comprising a translucent face constructed and arranged for positioning proximate to said top of said cavities (200, 500; col. 8, lines 13-16).

8) Regarding claim 62, Montalan et al. discloses all of the claimed subject matter as in the consideration of claim 50.

9) Regarding claims 64-67, Montalan et al. discloses all of the claimed subject matter as in claim 63, plus the consideration of claims 54-57. ***Claim Rejections - 35 USC § 103***

Art Unit: 2632

3. Claims 51 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montalan et al.

1) Regarding claim 51, Montalan et al. discloses all of the claimed subject matter as in claim 50, wherein:

While Montalan et al. only shows the profile depiction of the housing, since the light signaling assembly block of Montalan et al. is for the rear end of a motor vehicle and is conventionally designed to perform a plurality of lighting functions such as side-marker light, brake light, turn indicator light, fog light, etc. in various specific zones (col. 3, lines 18-23) and since such lights conventionally include substantially rectangular housing shapes, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to use substantially rectangular housing.

2) Regarding claim 63, Montalan et al. discloses all of the claimed subject matter as in claim 62, plus the consideration of claim 51.

4. Claims 58-61 and 68-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montalan et al. in view of Meinershagen (US pat. #4,556,862).

1) In considering claims 58-60, Montalan et al. met all of the claimed subject matter as in claim 50, wherein:

Montalan et al. teaches that the LED light signaling assembly is for the rear end of a motor vehicle and is conventionally designed to perform a plurality of lighting functions such as side-marker light, brake light, turn indicator light, fog light, etc. in various specific zones (col. 3, lines 18-23) without specifying its control aspects.

Art Unit: 2632

Meinershagen disclosed in the same vehicle signaling art a vehicle external warning light system (Figs. 13-14 & 17) using a plurality of light emitters (lamps of Figs. 14 and 17) controlled by a controller (129 of col. 9, lines 9-10) in electric communication with the light emitters (Fig. 17) and constructed and arranged to selectively activate the light emitters thereby producing at least two different types of visually distinct warning light signals (left turn, right turn, braking, etc. according to col. 3, line 14 to col. 4, line 40 and Fig. 17) in at least one combination comprising at least one pattern of light signals (left moving light pattern, right moving light pattern, etc), said light emitters receiving power from a power source (71 of Fig. 17).

In view of the teachings by Montalan et al. and Meinershagen, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to use an LED light assembly block such as taught by Montalan et al. to implement a controller-controlled vehicle signaling system such as taught by Meinershagen so that the LED assembly provides an improved warning light signal having brighter outputs with longer operating life and lower power consumption.

2) In considering claim 61, Montalan et al. and Meinershagen render all of the claimed subject matter obvious as in claim 59, including:

--the claimed at least one sequence of visually distinct warning light signals is met by the sequential activations shown in Tables 1-3 and 5 of Meinershagen.

3) Regarding claims 68-71, Montalan et al. discloses all of the claimed subject matter as in claim 62, plus the consideration of claims 58-61 in view of Meinershagen.

***Response to Arguments***

Art Unit: 2632

5. Applicant's arguments filed 2/3/05 have been fully considered but they are not persuasive.

1) New claims 50-71 are similar but not identical to canceled previous claims, and the correspondingly rejection of new claims 50-71 are slightly different, e.g. only rejections using Montalan et al. alone, and Montalan et al. in view of Meinershagen are pending.

2) Regarding the 35 USC 102 (b) rejection using Montalan et al., Montalan et al. clearly discloses the claimed culminator assembly comprising aligned reflector cavities as indicated in the detailed previous Office action rejection and the above rejection (for example, LED cavities 302 in Figs. 1-3 reflects/collects and directs/redirects light, which meets the claimed "culminator comprising.. reflector cavities..")

3) Regarding the combination of Montalan et al. in view of Meinershagen, the rejections clearly provided the motivation for combination. Montalan et al. teaches the culminator assembly for motor vehicle signaling without specifying signal controlling details and output pattern details, while Meinershagen teaches a motor vehicle signaling system for similar signaling purposes with specific controlling details and output pattern details but not using an LED culminator assembly, so that that one skilled in the art would have readily recognized that an LED culminator assembly as taught by Montalan et al. can be used to implement the controlled light signaling features taught by Meinershagen to provide the inherent advantages of having brighter outputs with longer operating life and lower power consumption associated with the use of LEDs and the use of the culminator assembly.

4) In conclusion, Applicant's arguments are not persuasive, and the rejections are maintained as proper.

Art Unit: 2632

*Conclusion*

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin C. Lee whose telephone number is (571) 272-2963. The examiner can normally be reached on Mon -Fri 11:00Am-7:30Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2632

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Benjamin C. Lee  
Primary Examiner  
Art Unit 2632

B.L.